

QUARTERLY PROGRESS REPORT

Estimation of Truck Volume and Flows		
NJDOT RESEARCH PROJECT MANAGER:		
Nicholas Vitillo		
PRINCIPAL INVESTIGATOR:		
Maria Boilé		
Period Covered: 3 rd Quarter 2003		
,		

Task	% of Total	% of Task	% of Task to	% of Total
		this quarter	date	Complete
Literature Search	6%	-	100%	6%
Task 1 Data collection	8%	-	100%	8%
Task 2 List of major truck generating	8%	-	100%	8%
facilities				
Task 3 Criteria or factors that influence	10%	-	100%	10%
changes in truck flow				
Task 4 Relationships between ADT and	33%	20%	65%	21.45%
truck volumes				
Task 5 Methods to estimate truck flow and	-	-	-	-
truck percentages				
Task 6 Validate the estimation method on	17%	10%	25%	4.25%
a selection of 12 routes				
Task 7 Apply methodology on a statewide	8%	0%	0%	0%
basis				
Task 8 Quarterly progress and final reports	10%	10%	50%	5%
TOTAL	100%			62.7%

1. Progress this quarter by task:

- Task 3 After finalizing the data set the 12 roadway segments to be examined in this project have been selected. The criteria and factors that influence changes in truck flow, which had been decided upon during the last meeting will be applied to the revised set of roadways.
- **Task 4** The statistical analysis has been performed again. New models have been developed to account for the functional classification of highways. Sensitivity analysis will be performed for each of these models. Profiles have been developed for each of the twelve selected roadways. These profiles include total daily, auto and truck traffic on the sections of the twelve highways. The report that had been produced on this task is being revised.
- $\it Task 5-A$ method for estimating an O-D matrix and determining truck volumes in the highway network based on truck volume observations through classification counts has been developed and tested. The preliminary results are not promising.
- **Task 6** A method for assessing the accuracy and validity of the results to be produced under task 4 is being devised.

Department of Civil and Environmental Engineering 623 Bowser Rd. Piscataway NJ 08854-8014 Tel: 732-445-0579 Fax: 732-445-0577



2. Proposed activities for next quarter by task

The statistical analysis of Task 4 will continue based on the discussion with NJDOT during the August 22 meeting.

- 3. List of deliverables provided in this quarter by task (product date)

 Technical reports on Tasks II-1 and II-2 and progress report on Task II-4
- 4. Progress on Implementation and Training Activities N/A
- 5. Problems/Proposed Solutions *N/A*

6. Budget Summary*

Total Project Budget(# of years)	2 Years	\$ 198,508.00
Total Project Expenditure to date		\$111,195
% of Total Project Budget Expended		56%
Task Order Number/Study Number:		116 / 4-26855
Current Task Order Budget (# of years)	Year 1 and 2	\$ 198,508.00
Actual Expenditure to date against current task order	*	\$111,195
% of current task order budget expended		56%

^{*} These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.